REMARKS

Claims 1-5 were pending in the above-identified application.

In the Office Action dated January 3, 2008, the Examiner rejected claims 1-5.

With this Amendment, claims 1, 2 and 5 were amended, and claims 6-7 were added.

Accordingly, claims 1-7 are at issue.

I. Objection To Claims

Claim 2 was objected to under 37 C.F.R. § 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. The Applicant has amended claims 1 and 2 such that claim 2 now further limits the subject matter of claim 1. Accordingly, the objection is now moot. Thus, Applicant respectfully requests that the above objection be withdrawn.

II. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 1-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nagura et al. (JP 2002272643A), in view of either Yamaura et al. (U.S. Patent No. 4,668,594); Takada et al. (U.S. Patent No. 5,958,281) or Möhwald et al. (U.S. Patent No. 6,475,663). Applicant respectfully traverses this rejection.

The present invention requires a particle having a layered structure with a coating layer made of an inorganic compound, selected from the group of $LiFePO_4$ and Li_3PO_4, and a carbonaceous material. *See* claim 1. A compressive and shear stress is applied on the powder so that the particles of one type adhere to the particles of another type. *See* Claim 1 and Specification, Page 20. Unlike the prior art, the combination of the carbonaceous material and the inorganic compound significantly improves high-temperature characteristics and cycle characteristics. Specification, Pages 2-4 & 6.

Additionally, claim 4 requires a weight ratio of the particles to the coating layers between the ranges 98:2 and 70:30. *See* claim 4. The range required by claim 4 ensures both the coatability of the particles and the lithium-ion conductivity. Specification, Page 9.

Nagura et al. teaches a coating layer made of an inorganic lithium compound and a carbonaceous conductive material. Paragraphs [0010]; [0015] & [0023]. Nagura et al. does not teach or even fairly suggest applying compressive and shear stress on the powder so that the particles of one type adhere to the particles of another type. Additionally, Nagura et al. does not teach or even fairly suggest that the inorganic lithium compound is selected from the group of $LiFePO_4$ and Li_3PO_4. Furthermore, Nagura et al. does not teach or even fairly suggest a ratio of the particles to the coating layers.

Yamaura et al. teaches a non-aqueous electrolyte that may include the solid electrolyte Li_3PO_4. Yamaura et al. Col. 5, lines 34-37. Yamaura et al. does not teach or even fairly suggest applying compressive and shear stress on the powder so that the particles of one type adhere to the particles of another type. Additionally, Yamaura et al. does not teach or even fairly suggest Li_3PO_4 or $LiFePO_4$ as a coating for an active particle. Furthermore, Yamaura et al. does not teach or even fairly suggest any ratio of the particles to the coating layers.

Takada et al. teaches Li_3PO_4 as a dopant for lithium ion-conductive solid electrolytes composed of a sulfide glass. Takada et al., Col. 1, lines 40-46. Takada et al. does not teach or even fairly suggest applying compressive and shear stress on the powder so that the particles of one type adhere to the particles of another type. Additionally, Takada et al. does not teach or even fairly suggest Li_3PO_4 or $LiFePO_4$ as a coating for an active particle. Furthermore, Takada et al. does not teach or even fairly suggest any ratio of the particles to the coating layers.

Möhwald et al. teaches a composition for an electrochemical cell that contains 0 to 1% of a pigment. Möhwald et al., Col. 1, lines 6-14. The pigment may be an inorganic solid, which includes $LiFePO_4$. Möhwald et al., Col. 3, line 15; Col. 4, lines 5-7 & lines 43-66. Möhwald et al. does not teach or even fairly suggest applying compressive and shear stress on the powder so that the particles of one type adhere to the particles of another type. Additionally, Möhwald et al. does not teach or even fairly suggest $LiFePO_4$ or $LiFePO_4$ as a coating for an active material. Furthermore, Möhwald et al. does not teach or even fairly suggest any ratio of the particles to the coating layers.

As discussed above, Yamaura et al., Takada et al. and Möhwald et al. do not teach or even fairly suggest either Li_3PO_4 or $LiFePO_4$ as a coating for an active material. Nor do these references teach or even fairly suggest applying compressive and shear stress on the powder so that the particles of one type adhere to the particles of another type. As such, it would not have been obvious to combine these references to modify Nagura et al. to include Li_3PO_4 or $LiFePO_4$ for use as a coating. Moreover, the claimed invention is the result of intensive studies by the inventors, which led to the determination that a positive material with a coating layer of Li3PO4 or $LiFePO_4$ and a carbonaceous material prevent decomposition of an electrolyte, attain good coatability and ensure good electron conductivity. Specification, Page 5. As discussed above, and in detail in the Specification, the prior art studied coatings on positive active materials, but failed to significantly improve high temperature characteristics of nonaqueous batteries. *Id.*

Taken singularly or in combination, the cited references fail to either teach or even fairly suggest all the limitations required by claims 1 and 5. As such, independent claims 1 and 5 are patentable over the cited references as are dependent claims 2-4 for at least the same reasons. Accordingly, Applicant respectfully requests that the above rejection be withdrawn.

III. Conclusion

In view of the above amendments and remarks, Applicant submits that all claims are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

Respectfully submitted,

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